

CLAIMS

What is claimed is:

1. A method for distributing a software product, comprising the steps of:

5 encoding the software product with an encryption data string for playback on a client console having a storage media detachably installed therein;

receiving user identification data from a user using the client console;

transmitting a first encryption key to the user;

coding an identification for the software product in the first encryption key;

10 receiving software product purchase information from the user;

encoding data representing the user purchase information and the first encryption key and a second encryption key; and

15 transmitting the first encryption key and second encryption key to the user to allow the user to decrypt the encrypted software product.

2. The method according to claim 2, wherein the software product purchase option comprises one of: purchasing the software product for a bounded period of time or purchasing the software product for a preset number of accesses.

20 3. The method according to claim 2 further comprising the step of establishing a communications link between the client console and a content provider server through a bi-directional communications network, wherein the communications link between the client console and the content provider server comprises a computer network link over a

land-based computer network, and wherein data received from the user and transmitted to the user are transmitted over the computer network link using a pre-established network protocol.

5 4. The method according to claim 2 further comprising the step of establishing a telecommunications link between the client console and a content provider server, and wherein data received from the user and transmitted to the user are transmitted over the telecommunications link using a telephone connection system, and further wherein, the user provides data to be transmitted to the server at least in part by alphanumeric codes
10 entered into a telephone keypad.

5. The method according to claim 2 further comprising the step of establishing a telephone link between the user and a content provider and wherein data received from the user and transmitted to the user are transmitted over the telephone link.

15 6. The method according to claim 2 wherein the first encryption key and second encryption key comprise part of a two-way public key/private key encryption system.

7. The method according to claim 6 wherein the first encryption key comprises a
20 public key of the user, and wherein the second encryption key comprises a public key of the client console.

8. The method of claim 7 further comprising the step of coding the second encryption key into a removable memory medium detachably coupled to the client console.

9. The method of claim 8 further comprising step of coding the purchase information and identification information for the client console on the removable memory medium such that the purchase information and identification information is associated with the executable code comprising the software product.

10. The method of claim 9 wherein the client console decodes the software product using a private key corresponding to the public key of the first encryption key.

11. The method of claim 9 wherein the client console is an interactive computer game station, and the software product is an interactive computer game executable on the client console.

12. A system for providing access to restricted use digital software products, comprising:

a server network comprising a server computer, a customer database storing user information, and a content database storing a plurality of software product titles;

a client console operated by a user and configured to playback a selection of the plurality of software titles;

a detachable storage media installable in said client console; said detachable storage media having a data structure thereon comprising at least one of a user identifier, wherein the server computer distributes a software product to a user of the client console and encrypts the software product using information comprising the user identifier and a purchase option governing use of the software product by the user.

13. The system of claim 12 wherein the user transmits decryption information to the server computer to provide access to the software product distributed to the user.

14. The system of claim 13 wherein the server computer distributes the software product to the user on a readable disk media.

15. The system of claim 13 wherein the server computer distributes the software product to the user over a communications link coupling the client computer to the server.

16. The system of claim 14 wherein the user transmits the decryption information to the server computer using a telephone coupled to the server computer through a public switched telephone network.

17. The system of claim 15 wherein the user transmits the decryption information to the server computer over the communications link.

18. The system of claim 13, wherein the purchase option comprises using the software product for a pre-set period of time.

19. The system of claim 13, wherein the purchase option comprises using the software product for a pre-set period of accesses.

20. The system of claim 13 wherein the software product is encrypted using a public key/private key encryption system, and wherein a user public key is assigned and transmitted to the user and a client console public key is assigned and coded in the detachable storage media installable in the client console.

21. The system of claim 13, wherein the client console is an interactive game computer, and the software product comprises an interactive computer game executable by the client console.

22. A server computer coupled to one or more client computers over a communications network, the server computer comprising:

a customer database storing user information, and a content database storing a plurality of software product titles;

a distribution module distributing a software product from the plurality of software product titles to a user of a client computer of the one or more client computers upon request of the user;

an encryption module encrypting the software product using information comprising a user identifier and a purchase option governing use of the software product by the user; and

a decryption module receiving decryption information from the user and providing
5 access to the software product upon confirmation of the decryption information.

23. The server computer of claim 22, wherein the purchase option comprises one of: using the software product for a pre-set period of time, and using the software product for a pre-set period of accesses.

24. The server computer of claim 23 wherein the software product is encrypted using a public key/private key encryption system, and wherein a user public key is assigned and transmitted to the user and a client console public key is assigned and coded in the detachable storage media installable in the client console.

25. The server computer of claim 24, wherein the client computer is an interactive game computer, and the software product comprises an interactive computer game executable by the client console.

26. The server computer of claim 25 wherein the software product and decryption information are transmitted between the server computer and client computer over the communications network.

27. The server computer of claim 25 wherein the software product is distributed to the client computer on a readable disk media accessible by the client computer, and wherein the decryption information is communicated to the server computer by the user over telephone system.

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28. An article of manufacture embodying a program of instructions executable by a machine, the program of instructions executed in network comprising a communications link between a client console and a content provider server through the network, the article of manufacture including instructions for:

- 10 receiving user identification data from a user using the client console;
transmitting a first encryption key to the user;
coding an identification for the software product in the first encryption key
receiving software product purchase information from the user;
encoding data representing the user purchase information and the first encryption
15 key and a second encryption key; and
transmitting the first encryption key and second encryption key to the user.

29. The article of manufacture of claim 28 further including instructions for allowing the user to purchase the software product for a bounded period of time or to purchase the
20 software product for a preset number of accesses.

30. The article of manufacture of claim 29 further including instruction for decoding decryption information transmitted by the user to gain access to the software product.

31. A method for limiting use of a distributed software product executed on a user console, comprising the steps of:

encrypting the software product with a first product key of a software

5 cryptography system;

distributing the software product to a user of the user console;

receiving a first console key of a console cryptography system comprising a first and second user key which are created on the user console;

encrypting a second product key of the software cryptography system, the second

10 product key related to the first product key by the software cryptography system; and

transmitting the encrypted second product key to the user so that the encrypted software product can be decrypted on the user console using the first user key.

32. The method of claim 31 further comprising the steps of:

15 receiving user purchase information from the user;

associating a counter value with the software product to limit use of the software product relative to a usage parameter.

33. The method of claim 32 further comprising the steps of:

20 encrypting the counter value using the first console key;

encrypting the encrypted counter value using the second user key;

transmitting the double encrypted counter value to the user;

allowing the user to decrypt the double encrypted counter value on the console using the first user key.

34. The method of claim 32 wherein the usage parameter comprises a number of
5 times the software product is accessed.

35. The method of claim 32 wherein the usage parameter comprises a period of time during which the software product may be accessed.

10 36. The method of claim 32 wherein the software product is programmed onto a readable medium capable of being played in a playback device coupled to the user console, and wherein the first console key comprises an identifier associated with the readable medium.

15 37. The method of claim 32 wherein the software product is programmed onto a readable medium capable of being played in a playback device coupled to the user console, and wherein the first console key comprises an identifier associated with the readable medium and a serial number of the user console.

20 38. The method of claim 33 wherein the software product is distributed to the user over a communication link coupling the user console to a content provider server.

39. The method of claim 33, wherein the client console is an interactive game computer, and the software product comprises an interactive computer game executable by the client console.

5 40. An apparatus for limiting use of a distributed software product executed on a user console, comprising:

means for encrypting the software product with a first product key of a software cryptography system;

means for distributing the software product to a user of the user console;

10 means for receiving a first console key of a console cryptography system comprising a first and second user key which are created on the user console;

means for encrypting a second product key of the software cryptography system, the second product key related to the first product key by the software cryptography system; and

15 means for transmitting the encrypted second product key to the user so that the encrypted software product can be decrypted on the user console using the first user key.

41. The apparatus of claim 40 further comprising:

means for receiving user purchase information from the user;

20 means for associating a counter value with the software product to limit use of the software product relative to a usage parameter.

42. The apparatus of claim 41 further comprising:

means for encrypting the counter value using the first console key;
means for encrypting the encrypted counter value using the second user key;
means for transmitting the double encrypted counter value to the user;
means for allowing the user to decrypt the double encrypted counter value on the
5 console using the first user key.

43. The apparatus of claim 42 wherein the usage parameter comprises one of a
number of times the software product is accessed; and a period of time during which the
software product may be accessed.

10 44. The apparatus claim 42 wherein the software product is programmed onto a
readable medium capable of being played in a playback device coupled to the user
console, and wherein the first console key comprises an identifier associated with the
readable medium.

15 45. The apparatus of claim 42 wherein the software product is programmed onto a
readable medium capable of being played in a playback device coupled to the user
console, and wherein the first console key comprises an identifier associated with the
readable medium and a serial number of the user console.

20 46. The apparatus of claim 42 wherein the software product is distributed to the user
over a communication link coupling the user console to a content provider server.

47. The apparatus of claim 42, wherein the client console is an interactive game computer, and the software product comprises an interactive computer game executable by the client console.

5 48. A method for distributing a software product for execution on a user console, comprising of the steps of:

distributing the software product to a user of the user console, wherein the software is stored on a detachable storage media and locked such that access is limited to an authorized user;

10 receiving a media identification of the detachable storage media, the media identification associated with each media;

generating a key to unlock the software using the media identification; and

15 transmitting the key to the user so that the software product can be unlocked on the user console using the key when the user executes the software product from the detachable storage media.

49. The method according to claim 48 further comprising the step of storing the key on a memory device coupled to the user console.

20 50. An article of manufacture embodying a program of instructions executable by a machine, the program of instructions facilitating distribution of a software product executed on a user console and transmitted to a user of the user console, the program of instructions comprising instructions for:

storing and locking the software product on a detachable storage media, such that access to the software product is limited to authorized users of the software product;

receiving a media identification of the detachable storage media, the media identification associated with each media;

5 generating a key to unlock the software using the media identification; and

transmitting the key to the user so that the software product can be unlocked on the user console using the key when the software product is executed from the detachable storage media.

10 51. The article of manufacture according to claim 50 further comprising instructions for storing the key on a memory device coupled to the user console.

52. A server computer configured to facilitate the distribution of a software product distributed to a user of a user console for execution on the user console, the server

15 computer programmed to:

store and lock the software product on a detachable storage media, such that access to the software product is limited to authorized users of the software product;

receive a media identification of the detachable storage media, the media identification associated with each media;

20 generate a key to unlock the software using the media identification; and

transmit the key to the user so that the software product can be unlocked on the user console using the key when the software product is executed from the detachable storage media.

53. The server computer of claim 52, wherein the key is stored in a memory device coupled to the user console.